

JUL 18 2005

FINAL

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

National Environmental Policy Act; Development and Operation of the Impact Test Facility at Marshall Space Flight Center, Alabama

AGENCY: National Aeronautics and Space Administration (NASA)

ACTION: Finding of No Significant Impact

SUMMARY: Pursuant to the National Environmental Policy Act of 1969 (NEPA), as amended (42 United States Code [U.S.C.] 4321 et seq.), the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA (40 *Code of Federal Regulations* [CFR] Parts 1500 through 1508), and NASA's regulations (14 CFR Part 1216, Subpart 1216.3), and based on the analyses in the Draft Environmental Assessment (EA), the National Aeronautics and Space Administration (NASA) has made a Final Finding of No Significant Impact (FONSI) with respect to the Proposed Action. The action involves the development and operation of a new Impact Test Facility (ITF) at Marshall Space Flight Center (MSFC), Alabama, to replace and expand the existing facility. The new facility is necessary to support both existing and emerging business opportunities at MSFC.

Date: July 2005

ADDRESSES: Public comments received on the draft EA during the public review period conducted June 13, 2005, through July 13, 2005, are given in Appendix C of the Final Environmental Assessment. Following the public review period, the final EA was prepared.

To receive a copy of the Final EA, contact Ms. Donna L. Holland, Environmental Engineer, Environmental Engineering Department, NASA Marshall Space Flight Center, AD10, Marshall Space Flight Center, Alabama 35812, Phone: (256) 544-7201, Email: Donna.L.Holland@nasa.gov

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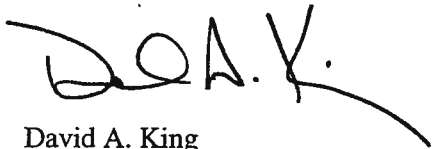
SUPPLEMENTAL INFORMATION:

A new impact test facility at MSFC is needed to support both existing business and emerging opportunities. The preferred alternative of constructing and operating the new facility at the proposed sites and the no-action alternative have been evaluated in this EA with respect to numerous natural, cultural, physical, and socioeconomic resources. Under the no-action alternative, the new facility would not be developed. The potential effects of the preferred and no-action alternative are summarized in Attachment 1.

On the basis of the findings of the analysis conducted for the EA, the sites proposed for development of the ITF were determined to be adequate with respect to the siting criteria and possible environmental impacts. The preferred alternative is to develop and operate new ITF at the location proposed in the East Test Area (ETA). This alternative is preferred because technical and safety analyses indicate optimal performance capabilities.

Because the development and operation of the new facility at the proposed location is not expected to result in any significant impacts, specific mitigation measures are not required. Best management practices would be implemented during construction to minimize fugitive dust and control erosion. There are no indications that implementation of the preferred alternative would violate any federal, state, or local environmental laws or regulations, including the National Environmental Policy Act or the Council on Environmental Quality regulations.

This analysis fulfills the requirements of the National Environmental Policy Act and Council on Environmental Quality regulations. An Environmental Impact Statement will not be prepared, and NASA is issuing this Finding of No Significant Impact.

A handwritten signature in black ink, appearing to read "D.A.K.", with a long horizontal stroke extending to the right.

David A. King
Director
George C. Marshall Space Flight Center
National Aeronautics and Space Administration

ATTACHMENT 1

Summary of Potential Effects of Alternatives and No-action Alternative

Resource	ETA and WTA Alternatives	No-action Alternative
Land Use	The current land use designation of both areas proposed for the ITF site is Test and Hazard; therefore, land use designation would remain the same. The land proposed for the ITF is currently unused; therefore, operation of the ITF at the site will make it more representative of its current land use designation.	No effect because the new facility would not be developed and operated.
Air Quality	In Alabama, air quality is assessed at the county level. MSFC is located within Madison County, which is currently designated by EPA to be in attainment for all criteria pollutants. No significant release of any regulated pollutants is anticipated; therefore, MSFC will continue to conform to all air quality standards. Therefore, no impacts to regional air quality are expected as a result of this development or operation of the proposed ITF.	No effect because the new facility would not be developed and operated.
Air Emissions	Emissions generated during operations of the proposed ITF would be minimal vapor clouds resulting from testing, using ammo and explosive small arms, and are not expected to exceed <i>de minimis</i> levels. Therefore, impacts to air emissions are expected to be insignificant.	No effect because the new facility would not be developed and operated.
Noise	No impacts are expected due to noise generated from activities associated with construction and development ITF in the ETA, while minor refurbishments to Bldg 4696 in the WTA and installation of the proposed pre-engineered building would have minimal impacts to noise already occurring at the site. Continuous noise due to operation of the proposed ITF is not anticipated; however, impact noise due to testing is expected. Modeling performed on an impact test system identical to outdoor impact test system 1 generated impact noise levels below maximum allowable exposure limits. Minor impacts due to noise are anticipated with implementation of the proposed action at the ETA or WTA alternatives.	No effect because the new facility would not be developed and operated.
Topography, Geology, and Soils	Minimal impacts on existing topography and soils during site clearing and grading at either location. Erosion controls would be implemented as necessary. No impacts would occur during operation of the facility at either location.	No effect because the new facility would not be developed and operated.

Resource	ETA and WTA Alternatives	No-action Alternative
Surface Water	<p>Development and operation of the new ITF at the ETA alternative location would have no adverse effects on surface water because the target area would be cleared of debris as a routine, daily interval during firing activities.</p> <p>Development of the new ITF at the WTA would have no adverse effects on surface water. Secondary containment measures would be incorporated into the design and conduct of this program to minimize potential impacts to the deluge pond located southwest of Bldg 4696 from ammunition used in testing. All NPDES requirements for the new ITF will be met during the permitting phase of the project. The ITF's target site lies north of the deluge pond southwest of Bldg 4696. Therefore, minimal impacts to surface water due to operations at the proposed ITF are anticipated.</p>	No effect because the new facility would not be developed and operated.
Groundwater	<p>No groundwater wells or deep subsurface disturbance is planned for this project at either location; therefore, development of the new ITF would not result in impacts to groundwater.</p> <p>Secondary containment measures would be incorporated into the design and conduct of this program to minimize potential impacts to groundwater water from ammunition used in testing. Therefore, impacts to groundwater due to operation of the ITF at either location are expected to be minimal.</p>	No effect because the new facility would not be developed and operated.
Floodplains	No portion of the proposed ITF at either site is in the floodplains; therefore, no impact is expected.	No effect because the new facility would not be developed and operated.
Vegetation	Both proposed locations are located within an area of developed land covered by pavements or mowed grass. The sites are surrounded by pine and hardwood forest. Proposed testing activities at the sites would be similar to current test activities performed; therefore, development and operation of this facility at either location would have no significant impact on vegetation.	No effect because the new facility would not be developed and operated.

Resource	ETA and WTA Alternatives	No-action Alternative
Wetlands	<p>There are no wetlands in the proposed ETA site location; therefore, there would be no impact to wetlands during development or operation of the ITF.</p> <p>Modifications to be undertaken for development of the ITF would be made on existing facilities and developed lands; therefore, there would be no impacts to wetlands due to development of the ITF at the WTA.</p> <p>Operation of the proposed ITF, including proposed testing activities would not result in anticipated wetland disturbance. No impacts are anticipated to the wetlands outside the levee. Overall, this project is projected to have minimal impact to wetlands located in the WTA.</p>	No effect because the new facility would not be developed and operated.
Wildlife	<p>Because testing activities at the proposed site would be similar to past and present uses of the facilities in the area, no additional impacts to wildlife or habitat are anticipated.</p> <p>Noise from ballistic tests could affect waterfowl and other wildlife at Wheeler National Wildlife Refuge adjacent to the west test area. Testing would generate high noise levels for brief periods. Overall impacts due to operations at the ITF are anticipated to be minimal.</p>	No effect because the new facility would not be developed or operated
Protected Species and Habitats	<p>Neither of the proposed ITF sites would not provide suitable habitat for any of the federally-listed or state-listed protected species that potentially occur at MSFC. In addition, operations would not release any chemicals or by-products that would contribute to water pollution. Therefore, no significant impacts to Threatened and Endangered Species and Habitat are expected.</p>	No effect because the new facility would not be developed or operated.
Cultural Resources	<p>The area proposed for the ITF in the ETA was part of a Phase 1 Cultural Resources Survey completed November, 2000. No archeological sites were discovered at the proposed site location; therefore, there would be no anticipated impacts to archeological sites during development or operation of the ITF in the ETA.</p> <p>Operation of the ITF in the ETA could have a minimal impact on the historical significance of the test stand.</p> <p>No soil disturbance in the WTA is planned; therefore, insignificant impact to archeological sites due to development of the ITF site is expected. Operation of the ITF would not impact archeological sites.</p>	No effect because the new facility would not be developed or operated.

Resource	ETA and WTA Alternatives	No-action Alternative
Hazardous/Toxic Materials and Wastes – Storage and Handling	All storage of and handling of hazardous and toxic materials and wastes at the new ITF will be conducted in accordance with all local, state, and federal laws and regulations, as well as with all applicable MSFC management plans and pollution prevention measures. High explosives will be stored in DOT approved containers. Therefore, minimal impacts are anticipated due to storage and handling of hazardous and toxic materials and wastes at either of the proposed ITF sites.	No effect because the new facility would not be developed or operated.
Waste Management	<p>Operations at the proposed ITF would generate hazardous and toxic wastes such as lead and high explosive residue. Waste generated due to operations at the proposed ITF will be removed from the site by the customer. In addition, ITF personnel will police the impact site and collect debris after each test.</p> <p>Hazardous waste generated due to ITF will also be managed through the design of the secondary containment system.</p> <p>Overall impacts to waste management due to operations at the ITF at either of the proposed locations are anticipated to minor.</p>	No effect because the new facility would not be developed or operated.
Contaminated Areas	<p>The proposed ITF location in the ETA is within the CERCLA area designated as Operable Unit 1 (OU-1). OU-1 has nine identified CERCLA sites, but none are located in the area proposed for the ITF location. Therefore, no impacts to contaminated areas are anticipated.</p> <p>The CERCLA Site Access Control Checklist for activities at NASA MSFC, given in Appendix B of the EA, states that no intrusive soil work, including grading or removal of soil from the area during development or operation of the facility shall occur in the WTA. In addition, the facility shall be designed to contain waste and debris generated during ballistic testing and the target area will be designed to minimize ballistic material from migrating through storm water to native soil or drainageways. The target area will also be designed to allow daily cleanup of ballistic materials when the testing facility is active. Therefore, minimal impact to contaminated areas is anticipated.</p>	No effect because the new facility would not be developed or operated.

Resource	ETA and WTA Alternatives	No-action Alternative
Demographics	Development and operation of the proposed ITF at either site would not result in an increase or decrease in personnel at MSFC; therefore, the local population would not be affected.	No effect because the new facility would not be developed or operated.
Regional Employment and Economic Activity	Development and operation of the proposed ITF at either site would not require additional personnel at MSFC; therefore, there would be no impact to regional employment or economic activity.	No effect because the new facility would not be developed or operated.
Income	Development and operation of the proposed ITF at either site would not require additional personnel at MSFC; therefore, there would be no impact to income.	No effect because the new facility would not be developed or operated.
Housing	Development and operation of the proposed ITF at either site would not require additional personnel at MSFC; therefore, there would be no impact to area housing.	No effect because the new facility would not be developed or operated.
Schools	Development and operation of the proposed ITF at either site would not require additional personnel at MSFC; therefore, there would be no impact to area schools.	No effect because the new facility would not be developed or operated.
Medical Facilities	Development and operation of the proposed ITF at either site would not result in an increase or decrease of personnel at MSFC; therefore, there would be no impact on medical facilities.	No effect because the new facility would not be developed or operated.
Fire Protection	Development and operation of the proposed ITF at either site would not change the scope or mission of fire protection services presently at MSFC; therefore, there are no expected impacts to fire protection.	No effect because the new facility would not be developed or operated.
Recreation	Development and operation of the proposed ITF at either site would not directly affect any recreational facility or result in an increase or decrease of personnel; therefore, there would be no impacts to recreation.	No effect because the new facility would not be developed or operated.
Protection of Children	Development and operation of the proposed ITF at either site would not result in significant impacts to air quality, groundwater, surface water, or hazardous and toxic materials and wastes; therefore, children would not be disproportionately affected.	No effect because the new facility would not be developed or operated.

Resource	ETA and WTA Alternatives	No-action Alternative
Utilities	<p>Operation of the proposed ITF at the ETA site would not result in a significant change in potable or industrial water usage and power for operation of the ITF in the ETA would come from an existing 480V substation located on the ground floor of building 4572. Therefore, there also would be no impact to electrical utilities in the ETA.</p> <p>Operation of the proposed ITF at the west test area site would not result in a significant change in potable or industrial water usage or electrical utilities; therefore, there would be no impact to utilities in the west test area.</p>	No effect because the new facility would not be developed or operated.
Wastewater	Operation of the proposed ITF would not result in a significant change in wastewater generation at either site; therefore, there would be no impact.	No effect because the new facility would not be developed or operated.
Solid Waste	Development and operation of the proposed ITF would not result in significant generation of solid waste at either site; therefore, there are no impacts expected to solid waste generation due to infrastructure.	No effect because the new facility would not be developed or operated.
Energy	Energy consumption at the proposed ITF sites would be minimal and the facilities will incorporate upgraded, energy-efficient lighting systems; therefore, no significant impacts to energy consumption at MSFC due to the proposed ITF are expected.	No effect because the new facility would not be developed or operated.
Transportation - Roads	Operation of the proposed ITF require 2-3 employees on site during testing; therefore, there would be no expected impact to the MSFC road systems at either location.	No effect because the new facility would not be developed or operated.
Transportation -Rail	Development and operation of the proposed ITF would not affect railroad operations because railroad services are not required by the existing facility and would not be required by either of the new proposed facilities.	No effect because the new facility would not be developed or operated.
Waterways	Development and operation of the proposed ITF would not affect waterways because waterways are not required by the existing facility and would not be required by either of the new proposed facilities.	No effect because the new facility would not be developed or operated.
Airspace	Development of the proposed ITF would not affect airspace because neither of the proposed sites are within any restricted airspace zone and operation of the ITF would not require coordination with airfield operations.	No effect because the new facility would not be developed or operated.
Pollution Prevention	All activities associated with the proposed development and operation of the new ITF would be consistent with the current MSFC P2 Plan.	No effect because the new facility would not be developed or operated.

Resource	ETA and WTA Alternatives	No-action Alternative
Environmental Justice	Development and operation of the proposed ITF would not result in significant impacts to air quality, groundwater, surface water, or hazardous and toxic materials and wastes; therefore, minority or low-income populations would not be disproportionately affected.	No effect because the new facility would not be developed or operated.
Ordnance	Development and operation of the new ITF at the proposed sites would not pose any ordnance-related risks because neither of the proposed sites are located in a part of MSFC where known ordnance activities have occurred.	No effect because the new facility would not be developed or operated.
PCBs	All NASA-operated buildings were inspected for PCB-containing equipment during a 1980's survey. The survey verified that the use of PCB transformers and capacitors had been eliminated in all MSFC buildings, excluding Building 4619. Other transformers found in NASA's older buildings previously containing PCB oil were replaced with non-PCB oil prior to 1991. No environmental issues were identified during the PCB survey and therefore no impacts are expected at either site as a result of PCB's.	No effect because the new facility would not be developed or operated.
Asbestos and Lead-Based Paint	<p>Asbestos abatement has been performed at bldg 4572. Therefore, minimal impacts due to asbestos are anticipated in the ETA.</p> <p>Asbestos abatement has been performed at bldg 4696 on the first through fifth floors. The proposed ITF will only utilize one room on the first floor of bldg 4696, for an office area. Therefore, minimal impacts due to asbestos are anticipated in the WTA.</p> <p>The existing structures, bldgs 4572 and 4696, may require some removal of lead paint and repainting during site preparation. All lead paint removal will be performed in accordance with MSFC policies and procedures. Therefore, minimal impacts due to lead paint are anticipated in either of the proposed locations.</p>	No effect because the new facility would not be developed or operated.